

[0001] This application is a national stage completion of PCT/JP2003/07899 filed June 20, 2003 which claims priority from Japanese Application Serial No. 2002-181726 filed June 21, 2002. The present invention relates to a catheter.

[0007] In order to attain the above object, a catheter of the present invention is a catheter used by being inserted into a coelom from outside of a body, and a distal end thereof being reached to a target region while a proximate end thereof being remained outside of the body. The catheter comprises: a forceps mechanism having a fist handling portion provided at the proximate end and a grasping portion provided at the distal end, wherein the grasping portion opens and closes in conjunction with manipulation at the first handling portion, and wherein the grasping portion is capable of holding the target region; and an injection mechanism having a second handling portion provided at the proximate end and an injection needle provided at the distal end, wherein the injection needle is moved forward up to a position to be protruded from the distal end and is moved back up to a position to be stored inside of the distal end, wherein the injection needle is capable of puncturing the target region to inject injectant into the target region, and wherein the forceps mechanism is provided with a link mechanism that opens and closes the grasping portion corresponding to shifting of the grasping portion.

[0008] In this catheter, the forceps mechanism is configured to be provided with the grasping portion at the distal end that opens and closes in conjunction with manipulation at the first handling portion at the proximate end, and the link mechanism that opens and closes the grasping portion corresponding to the shifting of the grasping portion. For example, a configuration, wherein one wire is lead through in center of a catheter and one end of the wire is connected to

the grasping portion, the grasping portion opens when pushed by the wire in association with reciprocation of the wire along an axial direction created by manipulation of the first handling portion at the proximate end, can be possible. Alternatively, a power transmission mechanism, wherein turning of a similar wire is converted into opening/closing movement of the grasping portion, can be configured.